

REMARKS

Reconsideration and allowance of the present patent application based on the foregoing amendments and following remarks are respectfully requested.

By this Amendment, claims 1-3, 11, 14-16, 18-19, 21-23, 27, and 29-30 are amended and claims 5-10, 12-13, 17, 20, 24-26, 28 and 31 are cancelled without prejudice or disclaimer to the subject matter therein. Support for the Amendment to the claims may be found, for example, in FIGS. 2 and 10, and in the corresponding description. After entry of this Amendment, claims 1-4, 11, 14-16, 18-19, 21-23, 27, and 29-30 will remain pending in the patent application.

The Examiner indicated on page 2 of the Office Action that the following references were not considered due to lack of English translation: 2707406 France, 19703090 Germany, 29709753 Germany, and 4407987 Germany. In response, Applicant submits a new Information Disclosure Statement with a new PTO Form 1449, citing 2707406 France, 19703090 Germany, 29709753 Germany, and 4407987 Germany along with their corresponding English Abstracts, which are relied upon for statements of relevance. The Examiner is respectfully requested to initial these references and sign and date PTO Form 1449 and return it to Applicant's representatives.

Claim 11 was rejected under 35 U.S.C. §112, first paragraph. In connection with the rejection, the Office Action alleged that the language "third memory" was not described in the specification. In response, claim 11 has been amended to replace the language "third memory" with "a port information storing section." Support for this new language can be found, for example, on page 6, lines 6-11, page 7, lines 16-25, and page 19, lines 4-16, of the specification. It is respectfully submitted that the amendment to claim 11 obviates the rejection. Accordingly, reconsideration and withdrawal of the rejection of claim 11 under 35 U.S.C. §112, first paragraph, are respectfully requested.

Claims 11 and 31 were rejected under 35 U.S.C. §112, second paragraph. Claim 31 has been cancelled without prejudice or disclaimer, thus rendering moot the rejection of claim 31. With regard to claim 11, the Office Action alleged that the language "third memory" renders the claim indefinite. As mentioned previously, claim 11 has been amended to replace this language with "a port information storing section." Applicant notes that the amendment to claim 11 obviates the rejection. Accordingly, reconsideration and withdrawal of the rejection of claim 11 under 35 U.S.C. §112, second paragraph, are respectfully requested.

Claims 1-31 were rejected under 35 U.S.C. 102(e) based on U.S. Pat. No. 6,651,225 to Lin *et al.* (hereinafter “Lin”). The rejection is respectfully traversed.

Claims 5-10, 12-13, 17, 20, 24-26, 28 and 31 have been cancelled without prejudice, thus rendering moot the rejection of these claims.

Applicant respectfully submits that claims 1, 19 and 23 are patentable over Lin at least because each of these claims recites a simulator for debugging a mechanism control program, the mechanism control program being used for controlling a mechanism which performs a mechanical operation and a hardware which drives and controls the mechanism, the simulator comprising, *inter alia*, a command information storing section for storing command information based on the mechanism control program, the command information being used for driving and controlling the mechanism and being readable by the simulation CPU, and pseudo-operation means for simulating an operation of the mechanism and an operation of the hardware used to drive and control the mechanism, when the simulation CPU reads the command information from the command information storing section. Lin does not teach or suggest at least these features. Therefore, Lin does not teach or suggest each and every feature recited by claims 1, 19, and 23 and, as a result, cannot anticipate claims 1, 19, and 23.

Lin discloses a verification system controlled by a master clock for verifying the proper operation of a circuit design. (See col. 167, lines 22-23). Lin, however, only discloses simulating an ASIC operation (see FIG. 65, col. 17, lines 10-27 and col. 141, lines 7-15). Lin is completely silent about simulating a mechanical operation, much less about a pseudo-operation means for simulating an operation of the mechanism and an operation of the hardware used to drive and control the mechanism. Therefore, Applicant respectfully submits that claims 1 and 19 are allowable. Moreover, Applicant believes that claims 2-4, 11 and 18 are patentable over Lin by virtue of their dependency from claim 1 and for the additional features recited therein. Similarly, claim 21 is believed to be patentable over Lin by virtue of its dependency from claim 19 and for the additional features recited therein.

Applicant notes that the mechanism control program is used for controlling a real machine which performs a mechanical operation, as recited in claim 1. A real machine (see, e.g., FIG. 6B of the application) includes mechanisms such as a stepping motor Ma, a servo motor Mn, a solenoid Pa, and a PC motor Pb, and hardware such as an output port circuit 64 and a motor control circuit 65.

Applicant respectfully submits claim 14 is patentable over Lin at least because this claim recites a simulation method for debugging a mechanism control program, the

mechanism control program being used for controlling a mechanism which performs a mechanical operation and a hardware which drives and controls the mechanism, the simulation method comprising, *inter alia*, simulating an operation of the mechanism and an operation of the hardware used to drive and control the mechanism, when the command information is read out. Lin does not teach or suggest a method including at least this feature. Therefore, Lin does not teach or suggest each and every feature recited by claim 14 and, as a result, cannot anticipate claim 14.

As asserted previously, Lin only discloses simulating an ASIC operation, but is completely silent about simulating a mechanical operation. Therefore, claim 14 is believed to be allowable. Claims 15-16, 27 and 30 are believed to be patentable over Lin at least by virtue of their dependency from claim 14, and for the additional features recited therein.

Applicant respectfully submits that claim 22 is patentable over Lin at least because this claim recites a simulator for debugging a first mechanism control program, the first mechanism control program being used for controlling a mechanism which performs a mechanical operation and hardware which drives and controls the mechanism, the simulator comprising, *inter alia*, pseudo-operation means for simulating an operation of the mechanism and an operation of the hardware used for driving and controlling the mechanism, when the simulation CPU reads the first command information from the first command information storing section. As mentioned previously, Lin does not teach or suggest this feature. Therefore claim 22 is believed to be allowable.

Applicant respectfully submits that claim 29 is patentable over Lin at least because this claim recites a simulation method for debugging a mechanism control program, the mechanism control program being used for controlling a mechanism which performs a mechanical operation and a hardware which drives and controls the mechanism, the simulation method comprising, *inter alia*, simulating an operation of the mechanism and an operation of the hardware used to drive and control the mechanism, when the first command information is read out. As asserted in the discussion related to claim 14, for example, Lin is silent about such a feature. Therefore, claim 29 is believed to be allowable.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-4, 11, 14-16, 18-19, 21-23, 27, and 29-30 under 35 U.S.C. §102(e) based on Lin are respectfully requested.

Applicant has addressed all the Examiner's rejections and objections and respectfully submits that the application is in condition for allowance. A notice to the effect is earnestly solicited.

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Respectfully submitted,

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